#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003689 Address: 333 Burma Road **Date Inspected:** 22-Aug-2008

City: Oakland, CA 94607

OSM Arrival Time: 1400 **Project Name:** SAS Superstructure **OSM Departure Time:** 2300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Yu Dong Ping N/A **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** and Tower

### **Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe fabrication and perform Ultrasonic Testing (UT) of Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

### Assembly Bay # 2

This Quality Assurance (QA) inspector arrived at ZPMC in Shanghai China for observation of Orthotropic Bridge Girders (OBG) and Self Anchored Suspension (SAS) Bridge. This QA inspector received notification from day shift task leader to perform conventional Ultrasonic (A scan) Inspection for tack welds on deck panels. The inspection is preliminary prior to using the phased array system to verify indications found with conventional Ultrasonic testing. This QA inspector performed UT on deck panel DP042-001, weld 6 scanned 12 locations with 0 indications, weld 7 scanned 12 locations with 0 indications and weld 8 scanned 12 locations with 0 indications. QA inspector performed UT on deck panel DP063-001, weld 1 scanned 15 locations with 0 indications, weld 2 scanned 15 locations with 0 indications, weld 3 scanned 15 locations with 0 indications, weld 4 scanned 15 locations with 3 indications, weld 5 scanned 6 locations with 0 indications, weld 6 scanned 6 locations with 0 indications and weld 7 scanned 6 locations with 0 indications. A total of 114 tack welds were tested with 3 indications found. This QA inspector was informed by the task leader that a TL-6027 was not required at this time.

Sub Assembly Bay # 4

This QA observed ZPMC welder ID #068918, ID #053753, ID #067656 and ID #048659 performing Shielded



# WELDING INSPECTION REPORT

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Metal Arc Welding (SMAW) in the (3G) position on 33 meter tower double diaphragm web plate to web plate Partial Joint Penetration welds, NSD1-SA322 A/B 13, 14, 15 and 16. The QA Inspector randomly observed ZPMC CWI Yu Dong Ping monitoring weld parameters. The welding parameters observed appeared to be in general conformance with the approved posted Welding Procedure Specification.

# **Summary of Conversations:**

No relevant conversations occurred this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, 138 1694 2685, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer